

1. FLEROVA, O. V.
2. USSR (600)
4. Uza Valley - Geology, Stratigraphic
7. Geological structure of the area between the Sura, Kadada, and Uza Rivers (report on the work of geological party No. 1 for 1944/45). (Abstract.)  
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9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

FLEEROVA, O.V., kandidat geologo-mineralogicheskikh nauk.

Geological structure of the Sura-Moksha dome fold zone and the adjacent region of the Ul'yanovsk-Saratov Depression. Trudy VNIIGI no.2:99-106 '51. (MLRA 10:4)

(Sura Valley--Geology, Structural)

(Moksha Valley--Geology, Structural)

(Ul'yanovsk Province--Geology, Structural)

(Saratov Province--Geology, Structural)

FLEROVA, O.V.

Upper Cretaceous deposits of the Moksha, Sura, Sviyaga and upper  
Khopr river basins and of the Ulyanovsk right bank of the Volga  
River. Trudy VNIGNI no.5:22-40 '55. (MLRA 10:9)  
(Penza Province--Geology, Stratigraphic)

FLEROVA, O.V.; GUROVA, A.D.

New data on the stratigraphy and paleogeography of upper Cretaceous deposits in the Ul'yanovsk-Saratov region of the Volga Valley and in the middle reaches of the Don Valley. Trudy VNIIGRI no.7:145-165 '56. (MLRA 9:12)

(Volga Valley--Geology, Stratigraphic)  
(Don Valley--Geology, Stratigraphic)

ЛЕАОВ, Г.И.

SUVOROV, P.P.; SHIROVA, R.P.; KURA, I.S.; YAKOVA, I.I.; KURKOVA, M.S.;  
MECHITAYLO, S.K.; MAKAROVA, T.V.; PILLAYAR, A.I.; PILLAYAR, O.V.;  
IVANOVA, Z.P.; SUPSHTAN, K.S.

Central provinces of the Russian Platform. Trudy VNIIGRI no.161:171-248  
'57. (MIRA 10:9)

(Russian Platform--Geology)

FLEROVA, O.V., kand. geol.-mineral. nauk, red.; BAKIROV, A.A., red.; VEBER, V.V., red.; DANOV, A.V., red.; DIKENSHTAYN, G.Kh., red.; MAKSIMOV, S.P., red.; POZNYSH, M.A., red.; SAIDOV, M.N., red.; SEMIKHATOVA, S.V., red.; TURKEL'TAUB, N.M., red.; KHALTURIN, D.S., red.; SHABAYEVA, Ye.A., red.; ZARETSKAYA, A.I., vedushchiy red.; FEDOTOVA, I.G., tekhn. red.

[Mesozoic and Tertiary deposits of the central provinces of the Russian Platform] Mezozoiskie i tretichnye otlozheniya tsentral'nykh oblastei Russkoi platformy. Pod red. O.V. Flerovoi. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1958. 291 p. (MIRA 11:10)

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(Russian Platform—Geology, Stratigraphic)

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(MIRA 14:5)

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SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical  
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ANDREYEVA, N.M.; SKORODUMOV, D.Ye.; GAVRILOV, A.M.; PETRIKOVICH,  
N.P.. Prinimali uchastiye: MOKHOVA, M.A.; BORSUK, N.V.. PROSKUR-  
YAKOV, A.K., otv.red.; SHATILINA, M.K., red.; SOLOVYCHIK, A.A.,  
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(Hydrology--Yearbooks)

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inst. shkol NKP RSFSR, 1942. 45 p.

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to patients] Lechebnaia gimnastika pri zheludochno-kishechnykh  
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(EXERCISE THERAPY)

YANKELEVICH, Ye.I., FLEROVSKIY, Ye.A., CHERNYAKHOVSKIY, A.L.; BREYNINA,  
R.M., red.

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FLEROVSKIY, Ye.A.

YANKHELEVICH, Ye.I., kandidat meditsinskikh nauk (Moskva); FLEROVSKIY, Ye.A.,  
metodist (Moskva)

Exercise therapy in pulmonary emphysema. Med. sestra 15 no.11:3-7  
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(EXERCISE THERAPY)

(EMPHYSEMA, PULMONARY)

*FILE NO 504 1145/H*  
YANKELEVICH, Ye.I., kand.med.nauk; FLEROVSKIY, Ye.A.; CHERNYAVSKIY, A.L.;  
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~~FLEROVSKIY, Ye. A.~~  
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Therapeutic exercise after appendectomy. Med. sestra 16 no. 9:8-14  
S '57. (MIRA 11:1)

(EXERCISE THERAPY)

(APPENDIX (ANATOMY)--SURGERY)

YANKELEVICH, Ye.I., kand.med.nauk; FLEROVSKIY, Ye.A., prepodavatel'  
fizicheskogo vospitaniya (Moskva)

Physical education for children in schools. Med.sestra 17 no.3:3-8  
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(PHYSICAL EDUCATION FOR CHILDREN)

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FLEROVSKIY, Yevgeniy Alekseyeyich; NARUSOVA, I.Ya., red.;  
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(SPORTS MEDICINE)

*Br ab.*

*Q11-6 Heterocyclic*

**Aracinal compounds of 4-bromomethyl-5-carbomethoxy-3-methylpyrrole.** D. S. and M. S. (Arac. Rev., 1964, 21, 100-110; cf. A., 1965, 15, 600).—Dissolution of 3-amino-5-hydroxymethylpyrrole (4.48 g.) and coupling with 5-hydroxy-3-carbomethoxy-2-methylpyrrole (2.4 g.) gives 4,5-dimethyl-2-hydroxy-4-bromomethyl-5-carbomethoxy-3-methylpyrrole,  $C_{11}H_{14}O_4N_2$ ,  $M_p$ .

decomp. at 180° without melting. Three new arachnoides are synthesized by the reduction of arachnoidespyrrole (1.52-1.58 g.) with  $H_2$ ,  $PO_4$  at 160° in a current of  $H_2$  and  $HI$  as catalyst. These are obtained 4 : 4'-di(5"-hydroxy-5"-carbomethoxy-3"-methylpyrro-4"-yl)arachnoides,  $C_{22}H_{28}O_8N_4$ , decomp. at 220° without melting; 3 : 3'-dihydroxy-4 : 4',  $C_{22}H_{28}O_8N_4$ , decomp. at 220° without melting; and 4 : 4'-dihydroxy-3 : 3'-di(5"-hydroxy-5"-carbomethoxy-3"-methylpyrro-4"-yl)arachnoides,  $C_{22}H_{28}O_8N_4$ , decomp. at 210° without melting. S. S. M. M. M.

FLES, D.

Chemistry

Yugoslavian

With N. Nuic, "Azo compds. prepd. from pyrroles by coupling with benzenearsonic acids," Chem. Abs., 1950.

Derivatives of pyrrolazobenzeneacetic acids. N. Muzic and D. Fleš (Pliva Pharm. Co., Zagreb). *J. Amer. Chem. Soc.* 77:1950 (English summary); cf. C.A. 45, 9229a. — The synthesis is essentially the same as previously described. 2,4-Dimethyl-3,5-carbomethoxypyridine (I) was prepd. by the method of Kner. I was saponified in 10% NaOH, and converted to 2,4-dimethyl-3-carbomethoxy-5-pyrrolidenebutyric acid (II) by the method of Küster, *et al.* (C.A. 16, 2696). Decarboxylation of II by dry distn. gave 2,4-dimethyl-3-carbomethoxypyridine (III). I was also treated with concd. H<sub>2</sub>SO<sub>4</sub> by the method of Fischer and Walach (C.A. 20, 1629) to give 2,4-dimethyl-3-carbomethoxy-3-pyrrolidenebutyric acid, which was decarboxylated by heating at atm. pressure to 2,4-dimethyl-3-carbomethoxypyridine (IV). Attempts to couple diazotized 4,3-H<sub>2</sub>N<sub>2</sub>O<sub>2</sub>-N<sub>2</sub>C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H, and III were not successful; a resinous product, which could not be purified, was obtained, and III was isolated from the reaction mixt. Attempts to couple a salt of diazotized 3,4-H<sub>2</sub>N<sub>2</sub>O<sub>2</sub>-N<sub>2</sub>C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H (V) with IV were also unsuccessful. *p*-H<sub>2</sub>N<sub>2</sub>O<sub>2</sub>-N<sub>2</sub>C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H (4.34 g.) in 50 cc. H<sub>2</sub>O contg. 1.63 cc. concd. H<sub>2</sub>SO<sub>4</sub> was diazotized with 20 cc. N<sub>2</sub>NaO<sub>2</sub> at 0–5° and the product filtered into 3.34 g. III in 200 cc. abs. EtOH. 4-(3-Carbomethoxy-2,4-dimethyl-5-pyrrolidenebutyric acid) (VI) was obtained as an orange-yellow powder. VI was filtered, rinsed with water, dissolved in aq. NaOH, and the soln. clarified with active C; acidification with dil. HCl gave 4.3 g. VI, orange-yellow microcrystals, decomp. 210°, slightly sol. in water, somewhat more sol. in EtOH, nearly insol. in C<sub>6</sub>H<sub>6</sub> and ether, and sol. in dioxane; crystn. from dioxane gave well-formed needles. VI was pptd. from alk. soln. with dil. acids. VI was stable in air under light. V (4.66 g.) in 70 cc. H<sub>2</sub>O contg. 5.8 cc. concd. H<sub>2</sub>SO<sub>4</sub> was diazotized as above and the product filtered into 3.34 g. III in 200 cc. abs. EtOH. 5-(3-Carbomethoxy-2,4-dimethyl-5-pyrrolidenebutyric acid) (VII) was obtained on dilg. with H<sub>2</sub>O. VII was then dissolved in N NaOH, the soln. clarified with active C, added to 0.1 N HCl with concn. stirring, and the ppt. was filtered, washed with H<sub>2</sub>O, dried, and recrystd. twice from dioxane to yield 7.2 g. VII, yellow needles, decomp. 180°. VII was stable in air under light. (*p*-H<sub>2</sub>N<sub>2</sub>O<sub>2</sub>-N<sub>2</sub>C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H (1.46 g.) in 30 cc. H<sub>2</sub>O contg. 3.7 cc. concd. HCl was diazotized as above with 10 cc. N<sub>2</sub>NaO<sub>2</sub> and the soln. added dropwise at 5° or lower to 1.67 g. III in 70 cc. EtOH contg. 5 g. NaOAc, previously dissolved in a small vol. of H<sub>2</sub>O, to yield 6.2 g. 5.5-(3-Carbomethoxy-2,4-dimethyl-5-pyrrolidenebutyric acid) (VIII). VIII was filtered, washed with cold H<sub>2</sub>O, dried in vacuo, and recrystd. from dioxane and then from ether to yield 1 g. VIII, dark orange microcrystals, m. 151° (decomp.). VIII was sol. in EtOH, dioxane, and CHCl<sub>3</sub>. *p*-H<sub>2</sub>N<sub>2</sub>O<sub>2</sub>-N<sub>2</sub>C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H (2.17 g.) in 25 cc. H<sub>2</sub>O contg. 0.81 cc. concd. H<sub>2</sub>SO<sub>4</sub> was diazotized with 10 cc. N<sub>2</sub>NaO<sub>2</sub> and the product filtered into 1.67 g. IV in 200 cc. abs. EtOH; when the soln. was clear 15 g. NaOAc in a small amt. of H<sub>2</sub>O was added with cooling, and, after 1 hr., 4 l. H<sub>2</sub>O was added to ppt. 4-(3-carbomethoxy-2,4-dimethyl-5-pyrrolidenebutyric acid) (IX), yellow-orange powder. IX was twice dissolved in alkali and reprecip. by dil. HCl, washed with water, and dried in vacuo to yield 1.2 g. IX, darkens 100°, m. 185° (decomp.). IX was sol. in EtOH and dioxane, and stable in air under light. C. S. Shapiro

FLES, D.

nominal Abate.

Phenol (C<sub>6</sub>H<sub>5</sub>O) is a colorless, odorless, crystalline solid.

6

Amino acids. X. Some derivatives of optically active  $\alpha$ -amino acidhydrazides. K. Balenović, N. Bregant, D. Citar, B. Ficek, and L. Jambrić (Univ. Zagreb, Yugoslavia). *J. Org. Chem.* 18, 201-202 (1953); *cf. Chem.* 47, 869h. — A Rosenmund-Zetsche reduction of about 15 g.  $\alpha$ -phthalimido acyl chloride in xylene at 110-120° with 5% Pd-BaSO<sub>4</sub> until 80-90% of H<sub>2</sub> is used. HCl was evolved, washing the mass with Et<sub>2</sub>O, evap. of the Et<sub>2</sub>O from the filtrate, and adding the xylene soln. at 0°, gave above 60%  $\alpha$ -phthalimido aldehyde (I). Addn. of 0.01 mole NH<sub>4</sub>Cl to 1 mole I and 1.1 mole HCO<sub>2</sub>Et<sub>2</sub> in the min. amt. abs. EtOH, diln., after 2 days at 20°, with H<sub>2</sub>O and a little NH<sub>3</sub>, and Et<sub>2</sub>O extrn. gave the di-Et ester. Keeping 1 mole I, 1.1 moles (CH<sub>3</sub>)<sub>2</sub>SO<sub>4</sub>, and 10 vols. dioxane with 3% dry HCl at 20° for 4 days, *cruc. in vacuo* at 40° addg. H<sub>2</sub>O, and reprecip. gave the ethylene mercaptal, which was crystd. from MeOH. *N,N*-phthaloyl-L-cysteine aldehyde (65% yield) m. 112°, [ $\alpha$ ]<sub>D</sub><sup>20</sup> +20.9 ± 0.1° (c 2.16 C<sub>6</sub>H<sub>6</sub>); sublimation at 95-100°/0.04 mm. for 1 hr. gave partial racemization; semicarbazone, m. 226°; 2,4-dinitrophenylhydrazone, m. 203-4°; di-Et acetal (70%), m. 53°, [ $\alpha$ ]<sub>D</sub><sup>20</sup> -2.7 ± 0.3° (c 3.7 EtOH); ethylene mercaptal, m. 96° (racemate, 25% yield obtained from cold MeOH) [distn. of the mother liquor at 160-70°/0.03 mm. gave 70% active oil, [ $\alpha$ ]<sub>D</sub> 48.7 ± 0.4° (c 2.16 C<sub>6</sub>H<sub>6</sub>)]. *S*-Benzyl-N-phthaloyl-L-cysteine aldehyde (87%) m.

7-26-54

119-20°,  $[\alpha]_D^{25}$   $-5.0 \pm 0.5^\circ$ ; distn. at 180°/0.03 mm. gave partial racemization; semicarbazone, m. 205-0.5°; di-Et acetal (97%), m. 73°, b.p. 200-20°,  $[\alpha]_D^{25}$   $-4.7 \pm 1.4^\circ$  (c 1.5 CH<sub>2</sub>Cl<sub>2</sub>); ethylene mercaptal (72.3%), m. 98-100°, b.p. 230°  $[\alpha]_D^{25}$   $-60.14^\circ \pm 1^\circ$  (C<sub>6</sub>H<sub>6</sub>). O-Methyl-N-phthaloyl tyrosine aldehyde (100%) m. 88°,  $[\alpha]_D^{25}$   $-150 \pm 1^\circ$  (c 0.5 EtOH); semicarbazone, m. 227-9°, di-Et acetal (81%), b.p. 160°,  $[\alpha]_D^{25}$   $-108^\circ \pm 0.4^\circ$  (c 2.36 Et<sub>2</sub>O) (distn. did not change the  $[\alpha]$ ); ethylene mercaptal (89%), m. 103°,  $[\alpha]_D^{25}$   $-105 \pm 0.8^\circ$  (c 0.18 CH<sub>2</sub>Cl<sub>2</sub>). Refluxing the acetal with 1 mole N<sub>2</sub>H<sub>4</sub>·H<sub>2</sub>O in EtOH for 30 min. removed the N,N-phthaloyl group as the insol. hydrazide (II) and concn. in vacuo of the filtrate gave the following compds. The mercaptals were similarly treated for 4 hrs., N HCl added to the mixt., and the mixt. kept at 0° to give more II; the filtrate treated with excess NH<sub>4</sub>OH and extd. with Et<sub>2</sub>O. L-Alanine aldehyde di-Et acetal (36%) b.p. 95-105° (bath temp.),  $[\alpha]_D^{25}$   $17.8 \pm 0.3^\circ$  (c 1.32, N HCl); ethylene mercaptal (97%), b.p. 146-55°,  $[\alpha]_D^{25}$   $18.5 \pm 0.2^\circ$  (c 1.98 CH<sub>2</sub>Cl<sub>2</sub>); S-Benzyl-L-cysteine aldehyde di-Et acetal (84%), b.p. 135-10°,  $[\alpha]_D^{25}$   $-2.0 \pm 0.2^\circ$  (c 2.49 CH<sub>2</sub>Cl<sub>2</sub>); ethylene mercaptal, b.p. 150-80°,  $[\alpha]_D^{25}$   $-19.2 \pm 1^\circ$  (c 0.924 C<sub>6</sub>H<sub>6</sub>). O-Methyl-L-tyrosine aldehyde di-Et acetal (80.5%) after purification on an Al<sub>2</sub>O<sub>3</sub> column, b.p. 100°,  $[\alpha]_D^{25}$   $-79.2 \pm 0.1^\circ$  (c 0.7 CHCl<sub>3</sub>).

John W. Green

FLES, D.

Yugoslavia (430)

Technology

Arsenal compounds of 4-azo-5-oxy-2-methly-3-carbethoxypyrrole. p. 169,  
ARHIV ZA KEMIJU, Vol. 1, no. 14, Dec. 1952.

East European Accessions List. Library of Congress, Vol. 1, no. 14,  
Dec. 1952.  
UNCLASSIFIED.

V Preparation and properties of the amino acids L-β-homo-  
cysteine, L-β-homocysteine, L-β-methionine, and L-β-homo-  
djenkolic acid. S. Nalunović and D. Fleš (Univ. Zagreb,  
Yugoslavia). *Congr. Intern. Biochim. et Biophys. Commun.*,  
2 Congr., Paris 1952, 170 (in English); cf. C.A. 42, 4083a.  
Previously developed methods for the homologation of  
glycine (C.A. 46, 3004e) and the natural optically active  
amino acids tyrosine (C.A. 43, 8470i) and leucine (C.A. 46,  
13104f) gave the corresponding β-amino acids (structural  
formulas shown). These methods were applied to the  
homologation of L-β-benzyl-N-phthaloylcysteine. The L-  
β-amino-γ-benzylthiobutyric acid obtained was converted  
into L-β-amino-homocysteine, L-β-amino-homocysteine, L-β-  
methionine, and L-β-homodjenkolic acid. No expl. de-  
tails and no properties of the 6 new β-amino acids are given.  
W. C. Table

①

Handwritten: *FLS, D.*

Synthetic studies in the chloramphenicol series. II.  
 Synthesis of  $\beta$ -ethoxy- $\alpha$ -phthalimido- $\alpha$ -propylphenone. *Dei*  
 (P. M. Brajdic, and N. Stihac (Piva, Zagreb, Yugo-  
 slavia), *Arhiv Kem.* 26, 183-5 (1954) (in English); cf. C.A.  
 50, 260c.—To 24 g.  $\text{AlCl}_3$  in 130 ml.  $\text{C}_6\text{H}_6$  warmed to  $60^\circ$   
 28 g.  $\beta$ -ethoxy- $\alpha$ -phthalimidopropionyl chloride (I) in 80  
 ml.  $\text{C}_6\text{H}_6$  was added during 1.5 hrs., the mixt. refluxed 3  
 hrs. and cooled, 16 ml. concd.  $\text{HCl}$  and 100 g. ice added, the  
 aq. layer sepd. and extd. with  $\text{C}_6\text{H}_6$ , and the ext. washed  
 with  $\text{H}_2\text{O}$ , dried, and evapd. *in vacuo* to yield 24.8 g. dark  
 oil. By treating 5 g. of this oil with 5 g. Girard T reagent  
 in 80 ml. abs.  $\text{EtOH}$  gave 1.17 g. ketonic material, which  
 was dissolved in 10 ml.  $\text{C}_6\text{H}_6$  and washed with 10 ml. 10%  
 $\text{NaHCO}_3$ , the org. layer dried and evapd., the residue (0.325  
 g.) crystd. from  $\text{EtOH}$  to yield 0.15 g.  $\alpha$ - $\text{C}_6\text{H}_4(\text{CO})\text{NCH}$ -  
 $(\text{CH}_3\text{OEt})\text{Bz}$ , softens at  $106^\circ$ , m.  $110^\circ$ ; 2,4-dinitrophenyl-  
 hydrazone (II), m.  $191-4^\circ$  (from  $\text{EtOH-EtOAc}$ ). To  
 $\text{PhMgBr}$  (from 0.48 g.  $\text{Mg}$ , 3.15 g.  $\text{PhBr}$ , and 10 ml.  $\text{Et}_2\text{O}$ )  
 stirred in an ice bath 2 g.  $\text{CdCl}_2$  was added, the  $\text{Et}_2\text{O}$  evapd.,  
 10 ml.  $\text{C}_6\text{H}_6$  added, 5.6 g. I in 15 ml. dry  $\text{C}_6\text{H}_6$  dropped in,  
 the mixt. refluxed 2 hrs., an ice-cold soln. of 10 g. tartaric  
 acid in 50 ml.  $\text{H}_2\text{O}$  added, the aq. layer sepd. and extd.  
 thrice with 20 ml.  $\text{Et}_2\text{O}$ , the ext. washed twice with 20 ml.  
 $\text{H}_2\text{O}$ , dried, and evapd. *in vacuo* to give 3.7 g. dark oil;  
 this dissolved in  $\text{EtOH}$  gave upon addn. of 2,4-( $\text{O}_2\text{N}$ ) $_2\text{C}_6\text{H}_3$ -  
 $\text{NHNH}_2$  0.37 g. crude II, m.  $175-82^\circ$ ; after 2 crystals from  
 $\text{EtOH}$  with a trace of  $\text{CHCl}_3$ , it m.  $192-5^\circ$ . E. G.

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FILES, P.

Synthesis of bis( $\beta$ -chloroethyl)amides and bisethylenimides of some dicarboxylic acids. ~~Dr. Fies and A. Mark~~ CH

vac-Prilic ("Pliva," Zagreb, Yugoslavia). *Arhiv kem.* 25, 230-42 (1954) (in English).—Ethylenimine (0.9 g.) (I) in 10 ml.  $\text{CHCl}_3$  was added during 0.5 hr. with cooling and stirring to a soln. of 1.8 g.  $(\text{CH}_2\text{CHCOCl})_2$  in 15 ml.  $\text{CHCl}_3$ ; stirred 0.5 hr. more, and the crystals filtered off and washed with 40 ml.  $\text{CHCl}_3$  to give 2.7 g.  $(\text{CH}_2\text{CHCONHCH}_2\text{CH}_2\text{CH}_2\text{Cl})_2$ , m. 222° (decomp.); analytical sample, m. 223-9° (decomp.) (from 50% EtOH). Similarly bis( $\beta$ -chloroethyl)amides of following acids were prepd. (m.p. and % yield of amides given): dihydromuconic (II), 140-7°, 97;  $(\text{HO}-\text{CC}_6\text{H}_4)_2\text{O}$  (III), 181-2°, 30;  $(p-\text{HO}_2\text{CCH}_2\text{C}_6\text{H}_4)_2\text{O}$  (IV), 192-3.5°, 65; all crystd. from iso-PrOH. A soln. of 1.8 g.  $(\text{CH}_2\text{CHCOCl})_2$  in 15 ml.  $\text{Et}_2\text{O}$  was dropped with stirring to a soln. of 0.88 g. I and 3.2 g.  $\text{Et}_3\text{N}$  in 20 ml.  $\text{Et}_2\text{O}$  at 0 to -5°, the mixt. stirred an addnl. 45 min. at 0°, the sepd.  $\text{Et}_3\text{N}\cdot\text{HCl}$  filtered off, washed with 10 ml.  $\text{Et}_2\text{O}$ , the  $\text{Et}_2\text{O}$  soln. evapd. *in vacuo* to yield 1.7 g.  $(\text{CH}_2\text{CHCONCH}_2\text{CH}_2\text{CH}_2)_2$ , m. 59° (from  $\text{Et}_2\text{O}$ ), polymerizes on standing. By the same procedure bisethylenimides of following acids were prepd. (m.p., solvent for crystn. and % yield of imides given): muconic (V), 110°, iso-PrOH, 71; III, 53°,  $\text{Et}_2\text{O}$ , 89; and IV oil, —, 67. For  $\text{V C}_6\text{H}_4$  was used instead of  $\text{Et}_2\text{O}$ .

E. Guzik

①

FILES, D.

✓ Synthetic studies in the chloramphenicol series. III. Synthesis of *three-nt-chloramphenicol* from vt-serine ethyl ether. D. Fleš, B. Balenović, R. Marušić, and N. Manger ("Pliva, Zagreb, Yugoslavia). *Arhiv Kem.* 27, 1-8 (1955) (in English); cf. *C.A.* 50, 864b. — A mixt. of 2.2 g.  $\alpha$ -C<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>NCH(CH<sub>2</sub>OEt)Bz (I), 4.15 g. (iso-PrO)<sub>2</sub>Al and 40 ml. iso-PrOH was heated 7 hrs. in an oil bath under partial reflux, iso-PrOH removed *in vacuo*, 20 ml. C<sub>6</sub>H<sub>6</sub> and a soln. of 30 g. tartaric acid in 50 ml. H<sub>2</sub>O added to the residue, the aq. layer sep'd. and extd. with three 10-ml. portions of C<sub>6</sub>H<sub>6</sub>, the exts. dried and evap'd. to leave 2.2 g. crude  $\alpha$ -C<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>NCH(CH<sub>2</sub>OEt)CH(OH)Ph (II) (all. compds. reported are 153-5°; analytical sample m. 156-7° (from EtOH)). An analogous prep'n. from crude I gave II in 17.2% yield [calcd. on  $\alpha$ -C<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>NCH(CH<sub>2</sub>OEt)COCl]. A mixt. of 19 g. II, 19 ml. C<sub>6</sub>H<sub>6</sub>N and 30 ml. Ac<sub>2</sub>O let stand overnight, poured on 240 g. ice, extd. with EtOAc, the exts. washed with three 10-ml. portions of 25% H<sub>2</sub>SO<sub>4</sub>, then with NaHCO<sub>3</sub> soln., dried and evap'd. gave 12.2 g. of an oil, which, dissolved in 30 ml. EtOH and kept overnight in an icebox, yielded 10 g.  $\alpha$ -C<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>NCH(CH<sub>2</sub>OEt)CH(OAc)Ph (III), m. 90-1°; b.p. 209-10°. A mixt. of 2.5 g. III, 35 ml. abs. EtOH, and 0.85 ml. 50% N<sub>2</sub>H<sub>4</sub>·H<sub>2</sub>O soln. was refluxed 1 hr., evap'd. *in vacuo*, the residue heated 10 min. with 25 ml. N HCl at 50°, let stand 30 min., the theoretical amt. of phthaloylhydrazide

(IV) filtered off, the filtrate refluxed 1.5 hrs., cooled with ice, alkalized with 20% NaOH soln., extd. with eight 20-ml. portions of EtOAc, and the extract dried and evap'd. *in vacuo* to leave 1.32 g. PhCH(OH)CH(NH<sub>2</sub>)CH<sub>2</sub>OEt (V), b.p. 110-20°. To 18 ml. of fuming HNO<sub>3</sub>, 4.6 g. III was added during 15 min. at -20°, the mixt. kept 35 min. at room temp., quenched on 150 g. of ice, neutralized with NaHCO<sub>3</sub>, extd. with EtOAc, and the ext. washed with H<sub>2</sub>O, dried, and evap'd. *in vacuo* to leave 5.12 g. of a semicryst. product, which crystd. from 50 ml. EtOH yielded 3.9 g.  $\alpha$ -C<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>NCH(CH<sub>2</sub>OEt)CH(OAc)C<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>-p (VI), m. 110-20°; analytical sample m. 129-31° (softens at 110°) (from EtOH); analytical Me<sub>2</sub>CO-petr. ether) III (5 g.) refluxed 2 hrs. with 14.5 ml. N N<sub>2</sub>H<sub>4</sub>·H<sub>2</sub>O soln. in abs. EtOH, cooled, IV filtered off and washed with 10 ml. CH<sub>2</sub>Cl<sub>2</sub>, the filtrate evap'd. *in vacuo*, the residue dissolved in 20 ml. CH<sub>2</sub>Cl<sub>2</sub>, kept 2 hrs. in ice to sep. addnl. IV (total yield 92%), and the CH<sub>2</sub>Cl<sub>2</sub> soln. evap'd. *in vacuo* to leave 3.56 g. of an oil which was dissolved in 2.4 ml. C<sub>6</sub>H<sub>6</sub>N, 2.4 ml. Ac<sub>2</sub>O added, let stand overnight, poured on 20 g. ice, extd. with five 5-ml. portions of EtOAc, and the exts. washed with 10% H<sub>2</sub>SO<sub>4</sub> and NaHCO<sub>3</sub> soln., and evap'd. *in vacuo* to give 4.3 g. of an oil; crystd. from 15 ml. Et<sub>2</sub>O it gave 3 g. PhCH(OAc)CH(NHAc)CH<sub>2</sub>OEt (VII), m. 87-9° (sublimed at 100-10°/0.04 mm.). VII (1.2 g.) added to 4.5 ml. fuming HNO<sub>3</sub> during 20 min. at -20° to -15°, let stand 30 min., poured on ice, neutralized with NaHCO<sub>3</sub>.

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(OVER)

extd. with EtOAc, and the ext. dried and evapd. *in vacuo* gave 1.4 g. of a yellow oil (VIII), which was heated 2.5 hrs. with 12 ml. 5% HCl on a steam bath, evapd. *in vacuo*, the residue dissolved in 4 ml. 48% HBr, evapd. *in vacuo*, the residue crystd. from EtOH-Et<sub>2</sub>O to give 0.42 g. *p*-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH(OH)CH(NH<sub>2</sub>.HBr)CH<sub>2</sub>OH (IX), m. 103-1.5°. IX was prepd. also in 0.4-g. yield by refluxing 2 g. crude VI with 5.2 ml. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O soln. in abs. EtOH during 1.5 hrs., dilg. with 6 ml. abs. EtOH, cooling, scpg. IV as above, dilg. with 6 filtrate, refluxing the residue with 20 ml. 5% HCl 2.5 hrs., cooling, extg. with Et<sub>2</sub>O, evapg. *in vacuo*, treating the residue with 4 ml. 48% HBr, allowing to stand for 2 days and crystg. from EtOH-Et<sub>2</sub>O. VIII gave after heating with 5% HCl, alkalization, extn. with EtOAc and evapn. *p*-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH(OH)CH(NH<sub>2</sub>)CH<sub>2</sub>OH, b.p. 140-50°. A mixt. of 13.5 ml. 48% HBr and 1.5 g. IX was heated 30 min. at 130° and 1 hr. at 120° in a sealed tube, evapd. *in vacuo*, the residue dissolved in 8 ml. H<sub>2</sub>O, alkalinized with concd. NH<sub>4</sub>OH, extd. with 100 ml. EtOAc, the ext. dried and evapd. *in vacuo*, and the residue (0.924 g.) crystd. from 10 ml. H<sub>2</sub>O to give 0.72 g. *p*-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH(OH)CH(NH<sub>2</sub>)CH<sub>2</sub>OH, m. 140-1°, which refluxed with excess Cl<sub>2</sub>CHCO<sub>2</sub>Me gave *DL*-threo-chloramphenicol, m. 150-1°. E. Guštak.

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FLESD.

Synthesis of 4-octene-2,7-dione from 1,8-bisdiazo-4-octene-2,7-dione. D. Pich, V. Tomasić, and A. Markovac-Prpić ("Pliva," Zagreb, Yugoslavia). *Croat. Chem. Acta* 30, 69-72 (1955) (in English).—A soln. of 3.5 g. ( $\text{N}_2\text{CHCOCH}_2\text{CH}_2$ ) (I) in 60 ml. EtOAc was treated in cold with 30 ml. 10% HCl, the aq. layer sepd., extd. twice with each 10 ml. EtOAc, the exts. washed with satd.  $\text{NaHCO}_3$  soln., dried, and evapd. *in vacuo* to give 3.7 g. ( $\text{ClCH}_2\text{COCH}_2\text{CH}_2$ ) (II), m. 95-7° (EtOH). I (2 g.) in 100 ml. Et<sub>2</sub>O was satd. with dry HCl in cold, the soln. neutralized with  $\text{Na}_2\text{CO}_3$ , the Et<sub>2</sub>O layer sepd., dried, evapd. *in vacuo*, the residue crystd. from 7 ml. EtOH, the cryst. product dissolved in 4 ml. 1:1 C<sub>6</sub>H<sub>6</sub>-petr. ether, decolorized with C, 1 ml. petr. ether added, the cryst. product discarded and the filtrate cooled to -5° to give 0.15 g.  $\text{ClCH}_2\text{COCH}_2\text{CHClCH}_2\text{CH}_2\text{COCH}_2\text{Cl}$ . II (1 g.), 2.5 g. Zn powder, and 50 ml. 80% AcOH was heated 0.5 hr. at 60-70°, the mixt. dild. with 40 ml. H<sub>2</sub>O, neutralized with  $\text{Na}_2\text{CO}_3$ , extd. with six 20 ml. portions Et<sub>2</sub>O, the exts. dried, evapd., and the residue distd. to give 0.49 g. ( $\text{AcCH}_2\text{CH}_2$ )<sub>n</sub>, b<sub>p</sub> 65-75°, m. 34-6°.

E. Gubek

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299 (WA)

215, 11

Synthetic studies in the chloroamphenicol series. IV.  
 Synthesis of *threo*-m. chloroamphenicol base from *DL*-serine  
 methyl ether. H. Flies and H. Hahn (Munich, Germany). *Chem. Ber.*  
 91, 1828. 1958. *Chem. Ber.* 91, 1828. 1958. (in English);  
 25%  $\text{NH}_3$  kept 8 days, evapd. *in vacuo*, and the residue re-  
 poured in 300 ml.  $\text{H}_2\text{O}$ , stirred, and slowly cooled gave 100  
 g. crude  $\alpha\text{-C}_6\text{H}_4(\text{CO})\text{NCH}(\text{CH}_3\text{OMe})\text{CO}_2\text{H}$  (I), m. 138-42°;  
 1:1-5% [analytical sample, m. 146-9° (softens at 146°) (from  
 1:2  $\text{MeOH-H}_2\text{O}$ )]. I (308 g.) and 308 ml.  $\text{SOCl}_2$  refluxed  
 30 min., evapd. *in vacuo*, the residue dissolved in 308 ml.  
 $\text{C}_6\text{H}_6$ , and 616 ml. petr. ether added yielded 300 g.  $\alpha\text{-C}_6\text{H}_4$   
 $(\text{CO})\text{NCH}(\text{CH}_3\text{OMe})\text{COCl}$  (II), m. 72-4°. A suspension  
 of 375 g.  $\text{AlCl}_3$  in 1050 ml. dry  $\text{C}_6\text{H}_6$  at 70° treated with 300 g.  
 II in 1000 ml.  $\text{C}_6\text{H}_6$  with rapid stirring, the mixt. refluxed 3  
 hrs., cooled, 100 ml.  $\text{HCl}$  and 1.5 kg. ice added, the aq.  
 layer sepd., extd. with three 450-ml. portions of  $\text{C}_6\text{H}_6$ , and  
 the  $\text{C}_6\text{H}_6$  layers washed with three 600-ml. portions of  $\text{H}_2\text{O}$   
 and two 250-ml. portions of satd.  $\text{NaHCO}_3$  soln., treated  
 with 30 g. C, dried, and evapd. *in vacuo* gave 220 g.  $\alpha\text{-C}_6\text{H}_4$   
 $(\text{CO})\text{NCH}(\text{CH}_3\text{OMe})\text{Bz}$  (III), m. 126-35°; analytical  
 sample, m. 139-40° (from  $\text{EtOH}$ , then  $\text{EtOAc}$ ). III (130  
 g.), 200 g. (iso- $\text{PrO})_2\text{Al}$ , and 2.6 l. iso- $\text{PrOH}$  heated 11 hrs.  
 in an oil bath with stirring, the  $\text{Me}_2\text{CO}$  distd. through an  
 80-cm. Vigreux column, the residue evapd. *in vacuo*, 1000  
 ml.  $\text{C}_6\text{H}_6$  and 330 g. tartaric acid in 2 l.  $\text{H}_2\text{O}$  added, the aq.  
 layer sepd., extd. with two 600-ml. portions of  $\text{C}_6\text{H}_6$ , the  
 exts. dried, evapd., and the residue dissolved in 400 ml.  
 $\text{EtOH}$  and kept overnight in an ice box yielded 60 g. *DL*-

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$\text{dl-threo-p-C}_6\text{H}_4(\text{CO})_2\text{NCH}(\text{CH}_3\text{OMe})\text{CH}(\text{OH})\text{Ph}$  (IV), m. 133-5°, and the mother liquors evapd. to a sirup, dissolved in 20 ml.  $\text{C}_6\text{H}_6$ , and 60 ml. petr. ether added gave an addnl. 10 g. IV; analytical sample, m. 137-8° (from  $\text{C}_6\text{H}_6$  and EtOH). The mother liquor, after sepn. of IV, evapd. in *vacuo*, the residue (60 g.) acetylated with 240 ml.  $\text{Ac}_2\text{O}$  in 120 ml.  $\text{C}_6\text{H}_6$ , kept overnight, evapd. in *vacuo*, and the residue crystd. from 250 ml. EtOAc gave 18 g. *dl-cyathro-p-C}\_6\text{H}\_4(\text{CO})\_2\text{NCH}(\text{CH}\_3\text{OMe})\text{CH}(\text{OAc})\text{Ph} (V), m. 160-2°; analytical sample, m. 163-6° (from EtOAc and EtOH). The mother liquor, after sepn. of V, evapd. to dryness and the residue crystd. from 50 ml. EtOH gave 14.5 g. *dl-threo-V*, m. 113-24° (recrystd. from EtOH, m. 120-32°). IV (52 g.) and 175 ml.  $\text{N}_2\text{H}_4 \cdot \text{H}_2\text{O}$  soln. in abs. EtOH refluxed 1.5 hrs., cooled, and the crystals filtered off and refluxed with three 250-ml. portions of  $\text{CH}_2\text{Cl}_2$  (quant. yield of phthaloylhydrazide), and the EtOH and  $\text{CH}_2\text{Cl}_2$  solns. evapd. in *vacuo* gave 20.5 g. *dl-threo-PhCH}(\text{OH})\text{CH}(\text{NH}\_2)\text{CH}\_3\text{OMe} (VI), m. 60-3°; analytical sample, b.p. 80-90°, m. 65°. VI (25 g.) in 40 ml.  $\text{C}_6\text{H}_6$  acetylated with 60 ml.  $\text{Ac}_2\text{O}$ , kept overnight, evapd. in *vacuo*,  $\text{H}_2\text{O}$  added and evapd. repeatedly and the residual oil triturated with petr. ether gave 36.4 g. *dl-threo-PhCH}(\text{OAc})\text{CH}(\text{NHAc})\text{CH}\_3\text{OMe} (VII); analytical sample, m. 83-4° (from EtO), b.p. 120-30°. Fuming  $\text{HNO}_3$  (105 ml.) treated with 24 g. VII added during 15 min. at 0° to -5° with stirring, the mixt. kept 30 min. at room temp., quenched on 300 g. ice, neutralized with  $\text{NaHCO}_3$ , dried and evapd. in *vacuo* gave 24 g. *dl-threo-p-O}\_2\text{NC}\_6\text{H}\_4\text{CH}(\text{OAc})\text{CH}(\text{NHAc})\text{CH}\_3\text{OMe} (VIII). VIII (24 g.) and 240 ml. 5% HCl heated 2.5 hrs. on a  $\text{H}_2\text{O}$  bath, evapd. in *vacuo*, the residue dissolved in 100 ml.  $\text{H}_2\text{O}$ , treated with C, and  $\text{NH}_3$  soln. added to pH 10 gave 12.5 g. *dl-threo-p-O}\_2\text{NC}\_6\text{H}\_4\text{CH}(\text{OH})\text{CH}(\text{NH}\_2)\text{CH}\_3\text{OMe}, m. 131-6° (sublimed at 0.35 mm., m. 140-3°). Crude VIII (6.7 g.) heated 0.5 hr. with 67 ml. 48% HBr in a sealed tube at 130° and 1 hr. at 120°, cooled, evapd. in *vacuo* with three 20-ml. portions of  $\text{H}_2\text{O}$ , the residue dissolved in 70 ml.  $\text{H}_2\text{O}$ , treated with C, and  $\text{NH}_3$  soln. added to pH 11 gave 2.1 g. *dl-threo-p-O}\_2\text{NC}\_6\text{H}\_4\text{CH}(\text{OH})\text{CH}(\text{NH}\_2)\text{CH}\_3\text{OMe}, m. 127-8° (sublimed at 0.35 mm., m. 140-3°).******

*Handwritten:* 27, 211-14 (1955) (in English) — A soln. of 6.5 g.  $\alpha$ -C<sub>11</sub>H<sub>17</sub>(CO)<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>COCl in 130 ml. C<sub>6</sub>H<sub>6</sub> was added dropwise with stirring to a cooled mixt. of 1.22 g. ethylenimine (I), 2.83 g. Et<sub>3</sub>N, and 50 ml. C<sub>6</sub>H<sub>6</sub> during 0.5 hr., Et<sub>3</sub>N.HCl and the residue crystd. from 20 ml. EtOH to give 5.6 g.  $\alpha$ -C<sub>11</sub>H<sub>17</sub>(CO)<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>COR (Ia) (R = 1-aziridinyl) through-  
out the abstr.), m. 101-5° (from EtOH). Similarly prepd. were:  $\alpha$ -C<sub>11</sub>H<sub>17</sub>(CO)<sub>2</sub>NCH<sub>2</sub>COR (II), yield, m. 116° (from EtOH);  $\alpha$ -C<sub>11</sub>H<sub>17</sub>(CO)<sub>2</sub>NCH(CH<sub>3</sub>OMe)<sub>2</sub>COR (III), m. 100-1° (from EtOH). A soln. of 2.5 g. Ia in 150 ml. abs. EtOH was added dropwise with stirring and cooling to 150 ml. abs. EtOH, passing simultaneously dry H<sub>2</sub>S through the soln. dur-  
ing 3-4 hrs., the mixt. kept overnight in an icebox and evapd. in *vacuo*, and the residue suspended in 100 ml. abs. EtOH, oxidized with air, evapd., and crystd. from 50% AcOH to yield 1.3 g.  $\beta$ -C<sub>11</sub>H<sub>19</sub>CO<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CONHCH<sub>2</sub>CH<sub>2</sub>SH (IV), m. 185-90°; analytical sample, m. 211° (from 50% AcOH). Similarly prepd. were:  $\beta$ -C<sub>11</sub>H<sub>19</sub>(CO)<sub>2</sub>NCH<sub>2</sub>CONHCH<sub>2</sub>CH<sub>2</sub>SH (V) from II, m. 174-5° (from EtOH);  $\beta$ -C<sub>11</sub>H<sub>19</sub>(CO)<sub>2</sub>NCH(CH<sub>3</sub>OMe)<sub>2</sub>CONHCH<sub>2</sub>CH<sub>2</sub>SH (VI) from III, m. 137-8° (from EtOH). V (2.63 g.) was refluxed 1 hr. with 22 ml. 0.5N NaH<sub>2</sub>PO<sub>4</sub> soln. in abs. EtOH, evapd. in *vacuo*, 10 ml. H<sub>2</sub>O added, acidified with AcOH, the sep. phthaloyl-  
soln. evapd. in *vacuo*, the residue (1.3 g. oil) dissolved in 40 ml. abs. EtOH, and a soln. of 1.1 g. oil dissolved in 40 ml. abs. EtOH added and left 1 hr. to yield the di-  
oxalate of (II-NCH<sub>2</sub>CONHCH<sub>2</sub>CH<sub>2</sub>SH), m. 184-5° (from EtOH-H<sub>2</sub>O 5:1). Similarly prepd. were: the dioxalate of (II-NCH<sub>2</sub>CH<sub>2</sub>CONHCH<sub>2</sub>CH<sub>2</sub>SH) from IV, m. 91-3° (from EtOH-H<sub>2</sub>O 5:1); the dioxalate of (III-NCH<sub>2</sub>CH<sub>2</sub>CONHCH<sub>2</sub>CH<sub>2</sub>SH) from VI, an oil.  
E. G. G. *Handwritten:* 6

*FLES, D.*

YUGOSLAVIA/Organic Chemistry - Naturally Occuring Substances  
and Their Synthetic Analogs

E-3

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4569

Author : Fles, D., Markovac-Prpic, A.

Title : Application of the Arndt-Eistert Synthesis to the  
Preparation of Dipeptides of Beta Amino Acids.

Orig Pub : Croat. chem. acta, 1956, 28, No 1, 73-76

Abstract : On rearrangement of diazomethyl-N-phthaloylaminoalkyl-  
ketones (I) in the presence of esters of alpha amino  
acids are formed esters of dipeptides containing resi-  
dues of alpha- and beta amino acids:  
$$C_6H_4(CO)_2NCHRCOCHN_2 \text{ I} + NH_2CHRCOOR \rightarrow C_6H_4(CO)_2-$$
  
$$NCHRCH_2CONHCHR'COOR + N_2$$
  
1.2 g I (R = H), 1.5 ml ethyl  
ester of L-alanine and 6 ml dioxane are heated at 60°  
and there is added a freshly prepared suspension of Ag<sub>2</sub>O

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YUGOSLAVIA/Organic Chemistry - Naturally Occuring Substances  
and Their Synthetic Analogs

E-3

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4569

in dioxane, after 10 minutes the filtrate is evaporated. Yield of ethyl ester of N-phthaloyl-beta-alanyl-L-alanine is 53.9%, MP 150-151° (from ethyl acetate + petroleum ether),  $[\alpha]_D^{20} -1.5 \pm 0.150$  (c 10.3; in dioxane) Analogously from I (R = H) and methyl ester of glycine (II) is obtained the methyl ester of N-phthaloyl-beta-alanylglycine, yield 47.8%, MP 162-162.5° (from ethyl acetate); from I (R = H) and ethyl ester of O-methyl-DL-serine (III) was obtained the ethyl ester of N-phthaloyl-beta-alanyl-O-methyl-DL-serine; yield 59.8%, MP 152-153° (from ethyl acetate); from I (R = CH<sub>3</sub>) and II was obtained the methyl ester of DL-N-phthaloyl-beta-aminobutyrylglycine, yield 28.5%, mp 119-120° (from benzene-petroleum ether); from I (R = CH<sub>3</sub>) and III was obtained DL-N-phthaloyl-beta-amino-butyryl-O-methyl-DL-serine, yield 15.4%, MP 125-126° (from ethyl

Card 2/3

- 123 -

YUGOSLAVIA/Organic Chemistry - Naturally Occuring Substances  
and Their Synthetic Analogs

E-3

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4569

acetate petroleum ether). Concurrently takes place  
the formation of diketo-piperazines, which is especuallly  
appreciable in the case of the reaction with II.

Card 3/3

- 124 -

CZECHOSLOVAKIA/Pharmacology and Toxicology. Muscle Relaxants.

V

Abs Jour: Ref Zhur-Biol., No 19, 1958, 89888.

Author : Fles, D.

Inst : -

Title : The Neuromuscular Blocking Action of Some Quarternary  
Ammonium Salt Derivatives of Esters of Muconic, Dihydro-  
muconic and Adipic Acids.

Orig Pub: Chemotherapeutika. i. farmac. sympos., Praha, 1956,  
45.

Abstract: No abstract.

Card : 1/1

V-27

### 3/ Correlation of cost

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The correlation of configuration of optically active norephedrine and alanine. D. Fleš and A. Markovac-Prpić (Pharm. Chem. Works, Zagreb, Yugoslavia). *Croat. Chem. Acta* 29, 183-7 (1957) (in English). —D-MeCHRCOCl [R = o-C<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>N throughout this abstr.] (5 g.) in 20 ml. C<sub>6</sub>H<sub>6</sub> added with stirring to 30 ml. C<sub>6</sub>H<sub>6</sub> and 7.03 g. AlCl<sub>3</sub> at 70° at such a rate as to maintain const. refluxing, the mixt. refluxed 3 hrs., cooled, and treated with 30 g. ice and 4 ml. concd. HCl, the aq. layer extd. with C<sub>6</sub>H<sub>6</sub>, the ext. washed with H<sub>2</sub>O, followed by NaHCO<sub>3</sub> soln., dried

over MgSO<sub>4</sub>, and evapd. *in vacuo* gave 8.5 g. residue, which crystd. from EtOH yielded 5.4 g. D-PhCOCHRMMe (I), m. 81-2° (75% EtOH), [α]<sub>D</sub><sup>20</sup> 165.5° (c 1.44, EtOH); 2,4-dinitrophenylhydrazine, m. 210-12° (EtOH). Similarly was prepd. L-I, m. 81-2°, [α]<sub>D</sub><sup>20</sup> -160.5° (c 2.0, EtOH). D-I (3.5 g.), 7 g. (iso-PrO)<sub>2</sub>Al, and 70 ml. abs. iso-PrOH refluxed 5 hrs. with the removal of the theoretical amt. of Me<sub>2</sub>CO, the iso-PrOH removed *in vacuo*, the residue hydrolyzed with 45 g. [CH(OH)CO<sub>2</sub>H], in 120 ml. H<sub>2</sub>O in the presence of 20 ml. C<sub>6</sub>H<sub>6</sub>, the aq. layer extd. with C<sub>6</sub>H<sub>6</sub>, the combined

C<sub>6</sub>H<sub>6</sub> solns. dried and evapd. *in vacuo*, and the residue (3.3 g.) recrystd. from 7 ml. EtOH gave 2.1 g. D-threo-PhCH(OH)-CHRMMe (II), m. 159-60° (EtOH), [α]<sub>D</sub><sup>20</sup> -111.3° (c 0.83, C<sub>6</sub>H<sub>6</sub>). Similarly was prepd. L-II, m. 156-7°, [α]<sub>D</sub><sup>20</sup> 108° (c 1.22, C<sub>6</sub>H<sub>6</sub>). A mixt. of L-II and D-II m. 130-2°. D-II (1.44 g.) refluxed 2 hrs. with 14 ml. EtOH and 14 ml. N<sub>2</sub>H<sub>4</sub>·H<sub>2</sub>O in EtOH, the solvent removed *in vacuo*, the residue treated for 10 min. at 50° with 25 ml. 10% HCl, kept 1 hr. at room temp., the phthalyl hydrazide filtered off, the filtrate evapd. *in vacuo* (bath below 50°), and the residue (1.44 g.) crystd. from 5 ml. EtOH and 10 ml. Et<sub>2</sub>O gave 0.82 g. D-threo-norephedrine hydrochloride (III), m. 178-9° (1:2 EtOH-Et<sub>2</sub>O), [α]<sub>D</sub><sup>20</sup> -42.9° (c 1.825, H<sub>2</sub>O). Similarly was prepd. L-III, m. 175-6°, [α]<sub>D</sub><sup>20</sup> 42.1° (c 2.35, H<sub>2</sub>O). A mixt. of L-III and D-III gave the same spot on paper chromatography for R<sub>f</sub> 0.78 (4:1:5 BuOH-HOAc-H<sub>2</sub>O) as the authentic DL-III, m. 168-9° (undepressed with DL-III, but strongly depressed with DL-erythro-norephedrine hydrochloride). D. Fleš

5  
2 may

Jag

FLES, D

1  
 ✓ Studies in the propiolactone series. II. Preparation of  $\alpha$ -succinimido- and  $L$ - $\alpha$ -(*p*-toluenesulfonamido)- $\beta$ -propiolactone. D. Fleš, A. Markovac-Prpić, V. Tomašić, and M. Milohnoja ("Pliva", Pharm. Chem. Works, Zagreb, Yugoslavia). *Croat. Chem. Acta* 30, 187-71 (1958); cf. *C.A.* 53, 4152c (in English).—A mixt. of 4 g.  $L$ -PhCH<sub>2</sub>SCH<sub>2</sub>CH(NH<sub>2</sub>)CO<sub>2</sub>H and 2 g. succinic anhydride heated to 180°, the heating disconnected, the inside temp. kept at 160-70° for 20 min., treated with 5 ml. EtOAc, 100 ml. C<sub>6</sub>H<sub>6</sub> and 30 ml. petr. ether, kept overnight in a refrigerator, the ppt. removed, the solvent evapd., and the residue crystd. from C<sub>6</sub>H<sub>6</sub> gave 1.2 g. of racemic PhCH<sub>2</sub>SCH<sub>2</sub>CH(CO<sub>2</sub>H)R (R = succinimido throughout) (I), m. 129-30°. I (2 g.) refluxed 1 hr. with 20 ml. SOCl<sub>2</sub>, excess SOCl<sub>2</sub> removed *in vacuo*, the residue dissolved in 10 ml. C<sub>6</sub>H<sub>6</sub>, impurities pptd. with 20 ml. petr. ether, decanted and the solvent evapd. to give 2 g. PhCH<sub>2</sub>SCH<sub>2</sub>CH(COCl)R (II), needles, m. 73-5° (C<sub>6</sub>H<sub>6</sub>-petr. ether). A soln. of 2 g. II in 250 ml. C<sub>6</sub>H<sub>6</sub> was added to 5.0 g. AlBr<sub>3</sub> in 50 ml. C<sub>6</sub>H<sub>6</sub>, the mixt. kept 1 hr. at 20°, hydrolyzed with 30 g. ice and 6 ml. concd. HCl, the aq. layer extd. twice with 20 ml. C<sub>6</sub>H<sub>6</sub>, the C<sub>6</sub>H<sub>6</sub> layers washed with H<sub>2</sub>O, dried, evapd., triturated with petr. ether (0.47 g. PhCH<sub>2</sub> recovered from petr. ether solns.) and the residue

crystd. from 2:1 EtOAc-petr. ether to yield 0.71 g. CH<sub>2</sub> <sup>6</sup> <sub>join</sub>

S.CO.CHR (III), m. 95-7°. Similar treatment of  $L$ -PhCH<sub>2</sub>SCH<sub>2</sub>CH(COCl)NHSO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Me-*p* gave 67%  $L$ -

CH<sub>2</sub>.S.CO.CHNH<sub>2</sub>SO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Me-*p* (IV), m. 101-2° (C<sub>6</sub>H<sub>6</sub>-petr. ether),  $[\alpha]_D^{25}$  -5.2° (c 6.285, dioxane). This hydrolyzed with AcOH and HI gave 49.5%  $L$ -cystine. IV (0.2 g.) in 15 ml. C<sub>6</sub>H<sub>6</sub> treated with 10 ml. 5% NaHCO<sub>3</sub> gave a white ppt., which was washed with H<sub>2</sub>O and extd. with C<sub>6</sub>H<sub>6</sub> to give 0.15 g. of a white powder, m. 175-80° (decompn.), sol. in HCONMe<sub>2</sub>, probably a linear polymer, which upon hydrolysis with AcOH and HI gave  $L$ -cystine. A mixt. of 0.5 g. IV, 0.49 g. H<sub>2</sub>NCH<sub>2</sub>CO<sub>2</sub>Me, and 4 ml. dioxane kept overnight at room temp., the solvent evapd. *in vacuo*, the residue dissolved in 50 ml. EtOAc, washed with 50 ml. H<sub>2</sub>O, dried (MgSO<sub>4</sub>) and the EtOAc evapd. *in vacuo* to give 0.4 g.  $L$ -[MeO<sub>2</sub>CCH<sub>2</sub>NHCOCH(NHSO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Me-*p*)CH<sub>2</sub>SH], m. 177-8.5° (EtOAc),  $[\alpha]_D^{25}$  47.5° (c 1.82, dioxane). Infrared absorption spectra of III and IV are recorded. The carbonyl band in propiolactone system seems to appear between 1760 and 1780 cm.<sup>-1</sup>, and C(lactone) -N stretching vibration near 1000 cm.<sup>-1</sup>

D. Fleš

YUGOSLAVIA/Organic Chemistry. Synthetic Organic Chemistry.

G

Abs Jour: Ref Zhur-Khim., No 2, 1959, 4610.

Author : Fles, D., Temasic, V., and Markovac-Prpic, A.

Inst :

Title : Synthesis of Octene-4-dione-2,7 from 1,8-bis-(diazoo)-octene-4-dione-2,7

Orig Pub: Croat Chem Acta, 30, No 1, 69-72 (1958) (in English with a Serbo-Croat summary)

Abstract: Octene-4-dione-2,7 (I) has been prepared by the following series of reactions:  $N_2CHCOCH_2CH=CHCH_2COCHN_2$  (II)  $\longrightarrow$   $ClCH_2COCH_2CH=CHCH_2COCH_2Cl$  (III)  $\longrightarrow$  (I). The starting II is synthesized from the acid chloride of dihydromuconic acid by a previously described method (C. Grundmann, Liebigs Ann Chem, 524, 31 (1936)). Preparation: 3.5 gms II in 60 ml ethyl

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YUGOSLAVIA/Organic Chemistry. Synthetic Organic Chemistry.

G

Abs Jour: Ref Zhur-Khim., No 2, 1959, 4610.

acetate are treated with 30 ml 10% HCl at 15-20°; the yield of III is 97.4%, mp 95-97° (from alc). The decomposition of II with dry HCl in ether at 0° gives  $\text{ClCH}_2\text{COCH}_2\text{CHCl}(\text{CH}_2)_2\text{COCH}_2\text{Cl}$ , mp 67-68° (from benzene-petroleum ether). The reaction of 1 gm III and 2.5 gms Zn in 80%  $\text{CH}_3\text{COOH}$  (30 min at 60-70°) followed by dilution with water gives I, yield 70%, bp 65-75° (the bath temperature)/0.05 mm, mp 34-36°; 2,4-dinitrophenylhydrazone, mp 207-209° (from  $\text{C}_6\text{H}_5\text{NO}_2$  - alc).

Card : 2/2

MARKOVAC-PRPIC, A.; FLES, D.; MILOHNOJA, M.

Synthesis and resolution of 1-phenyl-1- $\alpha$ -chlorophenyl-3-dimethylamino-  
propanol-(1). Croat chem acta 32 no.4:209-212 '60.

(EEAI 10:9)

1. Research Department "Pliva", Pharmaceutical and Chemical Works,  
Zagreb, Croatia, Yugoslavia.

(Amino alcohols) (Propyl alcohol)

MARKOVAC-PRPIC, A.; FLES, Dragutin

Synthetic studies in the polyene series. II. Synthesis of 15,15'-dihydro- $\beta$ -carotene. Croat chem acta 32 no.2:91-101 '60. (EEAI 10:4)

1. Research Department, "Pliva" Pharmaceutical and Chemical Works, Zagreb, Croatia, Yugoslavia. 2. Redakcioni odbor (Committee of Publication), Croatica Chemica Acta, member of the Committee (for Fles).

(Carotene) (Dihydrocarotene)

MATKOVIC, Jelka; WEBER, K.; FLES, D.; PAULIC, Nevenka

On inhibitory properties of oximes. 1. Action of oximes on the chemi-luminescence of luminol. Arh hig rada 11 no.3:177-202 '60.

1. Institut za medicinska istrazivanja i medicinu rada Jugoslavenske akademije znanosti i umjetnosti, Zagreb.

(HYDROXYLAMINES chemistry) (LUMINESCENCE)  
(HETEROCYCLIC COMPOUNDS chemistry)

DADIC, M., Ph. D.; FLES, D. (Zagreb)

Studies in the propiothiolactone series. III. Preparation of  
L- -acylamino- -propiothiolactones via carbodiimide method.  
Croat chem acta 33 no.2:73-75 '61.

1. Pharmaceutical Faculty, University of Zabreb, and " Pliva"  
Pharmaceutical and Chemical Works, Zagreb, Croatia, Yugoslavia
2. Organsko-kemijska industrija, Zabreb; Member of the Editorial  
Board, "Croatica chemica acta, Arhiv za kemiju" (for Fles).

ACC NR: AP6032806

SOURCE CODE: YU/0001/66/000/009/1594/1600

AUTHOR: Seke, Vesna (Graduate engineer; Consultant); Fles, Dragutin (Doctor; Director)

ORG: Organic Chemistry Industry, Zagreb (Organsko kemijska industrija)

TITLE: Study of optically active polyamides. II. Synthesis of optically active poly- $\gamma$ -methyl- $\epsilon$ -caprolactam [First part appeared in Croatica Chimica Acta, 1966, No. 1, entitled: "The Absolute configuration of  $\gamma$ -methyl- $\epsilon$ -caprolactam"]

SOURCE: Tehnika, no. 9, 1966, 1594-1600

TOPIC TAGS: polymer, polymerization, monomer, optically active polymer, polyamide

ABSTRACT: A survey of methods for the preparation of optically active polymers is given. In the experimental part the polymerization of optically active and racemic  $\gamma$ -methyl- $\epsilon$ -caprolactam from (S) (+)  $\gamma$ -methyl- $\epsilon$ -caprolactam and ( $\pm$ )  $\gamma$ -methyl- $\epsilon$ -caprolactam is described. (S) (+)  $\gamma$ -methyl- $\epsilon$ -caprolactam is obtained by two different methods: the first by conversion of optically active

Card 1/2

UDC: 678.675=861

ACC NR: AP6032806

$\alpha$ -methyl- $\gamma$ -phthalimidobutyric acid to  $\gamma$ -methyl- $\delta$ -phthalimidocaproic acid through two Arndt-Eistert syntheses; the second, by the resolution of  $\gamma$ -methyl- $\delta$ -phthalimidocaproic acid via diastereomeric quinine salt. The first method was used for determination of the absolute configuration of  $\gamma$ -methyl- $\delta$ -caprolactam, while the second was applied as a convenient preparative method for the preparation of optically active caprolactam. Polymerization of racemic and optically active monomers of high purity was carried out at 210C for 90 hr using 1% of water as a catalyst. Polymer yields were 59% for the optically active monomer, and 41.5% for the racemic monomer. Infrared spectra, intrinsic viscosity, and the influence of the solvent's composition on the specific rotation is given. Specific rotation of (S) (+) poly-( $\gamma$ -methyl- $\delta$ -caprolactam) showed a sharp maximum at 30 vol % of chloroform in m-cresol. Orig. art. has: 4 figures. [Based on authors' abstract] [KS]

SUB CODE: 07/SUBM DATE: none/ORIG REF: 001/SOV REF: 002/OTH REF: 031/

Card 2/2

FLES, D.; GHYCZY, T.

The absolute configuration of 3-carboxypyrrolidine  
( $\beta$ -proline). Croat chem acta 36 no.1:27-32 '64.

1. Laboratory of Organic Chemistry and Technology, Faculty  
of Technology, University of Zagreb, Zagreb.

DADIC, M.; FLES, D.

Studies in the propiothiolactone series. IV. Reaction of  $\beta$ -benzylmercaptopropionyl chloride with benzene in the presence of aluminum bromide. Croat chem acta 36 no.1: 37-41 '64.

1. Pharmaceutical Faculty, University of Zagreb, Zagreb.

FLES, M.

Synthetic studies in the chloramphenicol series. Pt.6.  
Groat chem acta 35 no.4:257-262 '63.

1. Research Department, "Pliva" Pharmaceutical and Chemical  
Works, Zagreb, Croatia, Yugoslavia.

FLESCH, A.:LITVAY, E.

Summary of the 1952 influenza epidemic. *Gyermekegygyaszat* 3 no. 8:  
239-244 Aug 1952. (CIML 23:5)

1. Doctors. 2. Children's Department, Peterffy Sandor-utcai Hospital-  
Polyclinic.

FLESCH, Gyorgy

Some economical questions relating to universal self-propelling chassis (UMA). Jarmu mezo gep 7 no.11:401-411 '60.

1. Gepipari Tudomanyos Egyesulet Mezogep Szakosztaly, Mezogepfejlesztési Intezet munkabizottsaga.

NIKECZ, Istvan; KAMOCSA, Sandor; FLESCH, Gyorgy; BANHAZI, Gyula; BANOCZY, Gyorgy; NAGY, Karoly; KUNFFY, Zoltan, dr.; KOLLER, Kalman; BAUMANN, Pal; KRAKOWIAK, Sztaniszlav (Varso, Lengyelország); FUTO, Istvan; SZABO, Jozsef; FERENCZI, Bela; TIBOLD, Vilmos, dr.; PUCHER, Odon; KOVACS, Laszlone; UDVARDI, Kornel

Discussion held in the field of "Rural electrification."  
Villamossag 8 no. 6:153-156 My-Je '60.

1. "Villamossag" szerkeszto bizottsagi tagja (for Banoczy).

FLESCH, Gyorgy, okleveles gepeszmernok; HOFFNER, Janos, okleveles  
mezogazdasz

Contribution to the discussion on the swing hammer (Lundell  
type) self-propelled choppers. Jarmu mezo gep 8 no.10:383-386  
0 '61.

1. Koho- es Gepipari Miniszterium Mezogepfejlesztési Intezet.

FLESCH, Istvan, dr.

Data on the calcification of lymph nodes caused by BCG vaccination. Orv. hetil. 105 no.21:971-977 24 My'64

1. Fovarosí Tanács Gyermek TBC Védelmi Központ.

\*

FLESCH, I.

FLESCH, I., MEZEY, P.

Clinical aspect of the eye fundus and its significance in tuberculous meningitis in early childhood and in miliary tuberculosis treated by streptomycin. Szemeszet No. 2, 1950, p. 129-35

1. First Pediatric Clinic (Director—Dr. Pal Gegesi Kiss) and First Eye Clinic (Director—Dr. Gusztav Horay), Budapest University.

CLML 19, 5, Nov., 1950

FLESCH, I.

Present problems of BCG vaccination. *Gyermekegygyaszat* 2 no.9:257-  
263 Sept 51. (CLML 21:1)

1. Doctor. 2. Szabadsaghegyi State Children's Sanatorium (Director-  
Head Physician--Dr. Istvan Flesch).

FLESCH, I.; HALASZ, S.

Tuberculosis in BCG vaccinated children. *Gyermegyógyászat* 2 no.9;  
264-266 Sept 51. (CLML 21:1)

1. Doctors. 2. Szabadsághelyi State Children's Sanatorium (Director  
Head Physician -- Dr. Istvan Flesch).

FLESCH, I.;SCHULER, D.;SZOKE, G.

Essential pulmonary hemosiderosis. Gyermekgyógyászat 4 no.10:300-311  
Oct 1953. (CML 25:5)

1. Doctors. 2. Szabadsaghegy State Children's Sanatorium (Director --  
Dr. Istvan Flesch) and First Institute of Pathological Anatomy and  
Cancer Research (Director -- Prof. Dr. Jozsef Baló) of Budapest Medical  
University.

FLESCH, I.

Tuberculosis vaccination. Orv. hetil. 94 no.28:757-760 12 July 1953.

(CIML 25:1)

1. Doctor. 2. Szabadsaghegy State Children's Sanatorium (Director -  
Head Physician -- Dr. Istvan Flesch).

FLESCH, I.; HALASZ, S.

New contributions on BCG vaccination in children. Orv. hetil. 94 no.32:  
881-884 9 Aug 1953. (CML 25:1)

1. Doctors. 2. Szabadsaghegy State Children's Sanatorium (Director - Head  
Physician -- Dr. Istvan Flesch).

FLESCH, Istvan; POZSONYI, Jozsef.

Sympathogonioma, seu neuroblastoma infantum. Gyermekgyógyászat  
5 no.3:86-92 Mr '54. (REAL 3:8)

1. A Szabadzaghgyi Allami Gyermekszanatorium (igazgato: Flesch  
Istvan, dr.) közleménye.  
(NEUROBLASTOMA, in inf. & child  
\*metastasis)

FLESCH, Istvan, dr.; PINTER, Gabriella, dr. SZOKE, Gyula, dr.; TOTI, Eva, dr.

Present status of the therapy of meningeal and acute military tuberculosis. *Gyermekgyógyászat* 5 no.8:225-235 Aug 54.

1. A Szabadzsághelyi Állami Gyermekszanatorium közleménye (igazgató:  
Flesch István dr.)  
(TUBERCULOSIS, MILIARY, ther.)

FLESCH, Istvan, dr.; KALASZ, Stefania, dr.

The present status of the BCG vaccination. *Gyermekgyógyászat* 5  
no.11:321-327 Nov 54.

1. A Szabadsághegyi Állami Gyermekszanatorium közleménye.  
(Igazgató- főorvos: dr. Flesch Istvan)  
(BCG VACCINATION)

FLESCH, Istvan, dr.; HALASZ, Stefania, dr.; SZENICSEY, Kornelia, dr.;  
Toth, Eva, dr.

Skin tests with heat-killed BCG vaccine. Orv. hetil. 95 no.25-26;  
677-681 24 June 54.

1. A Szabadzsaghegyi Allami Gyermekszanatorium (igazgato-foorvos:  
Flesch Istvan dr.) kozlemenye  
(BCG VACCINATION  
heat-killed vacc., skin test compared with tuberculin)

FLESCH, Istvan, dr.; POZSONYI, Jozsef, dr.

Sleep reaction after intrathecal inject. of streptomycin.  
Gyermekgyógyászat 6 no.4:120-122 Apr 55.

1. Szabadsághegyi Állami Gyermekszanatorium (ig. főorvos: Dr. Flesch Istvan) Extrapulmonalis Osztály (főorvos: Dr. Pozsonyi József) közleménye.

(STREPTOMYCIN, effects

sleep reaction after intrathecal inject. in ther. of  
spondylitis)

(SPONDYLITIS, therapy

streptomycin, intrathecal inject., causing sleep  
reaction)

(SLEEP

reaction after intrathecal streptomycin inject. in ther.)

FLESCH, Istvan, dr.

Tasks of a rural physician in control of tuberculosis.  
Gyermekegygyaszat 6 no.5:144-147 May 55.

1. A Szabadsaghegyi Allami Gyermekszanatorium (igazgato: Flesch Istvan dr.) kozlemenye.

(TUBERCULOSIS, prevention and control,  
in Hungary, role of rural physicians)

(RURAL CONDITIONS,  
tuberc. control in Hungary, role of rural physicians)

FLESCH, Istvan, dr.,; HALASZ, Stefania, dr.

Data on the preventive and therapeutic effects of BCG vaccination.  
Gyermekgyógyászat 6 no.12:365-374 Dec 55.

1. A Szabadsághegyi Állami Gyermekszanatorium közl. (igazgatóorvos:  
Flesch Istvan dr.)

(BCG VACCINATION

in Hungary, immunizing eff. in tuberc. & ther. value in  
meningeal tuberc. & asthma, statist. (Hun))

(TUBERCULOSIS, MENINGEAL, ther.

BCG vaccination, results (Hun))

(ASTHMA, ther.

same)

FLESCH, Istvan, dr., HALASZ, Stefania, dr., RAINTNER, Magda, dr.

Hemagglutination research in infantile tuberculosis. Tuberk.  
kardesei 8 no.1:21-25 Feb 55.

1. A Szabadsaghegyi Allami Gyermekszanatorium (igazgato- foorvos:  
Flesch Istvan dr.) kozlomenye.

(TUBERCULOSIS, in infant & child

Middlebrook-Dubos hemagglut. reaction in (Hun)

(HEMAGGLUTINATION,

Middlebrook-Dubos hemagglut. reaction in tuberc. in  
inf. & child. (Hun)

FLMSCH, Istvan, dr.,; SZOCSKA, Miklos, dr.,; SZOKE, Gyula, dr.

Anamnestic data in meningeal tuberculosis. *Gyermekegygyaszat* 7 no.2:  
52-57 Feb 56

1. A Szabadsaghegyi Allami Gyermekegygyaszat (igaz.-főorvos. Dr. Flesch Istvan) közl.

(TUBERCULOSIS, MENINGEAL, in inf. & child  
anamnestic data in 274 cases (Hun))

EXCERPTA MEDICA Sec.15 Vol.10/2 Chest Diseases Feb 57

517. FLESCH I. Közl. a Szabadsághegyi Állami Gyermekszanatórium Ból. \*A mindennapi gyakorlat főbb kérdései a gyermek-tbc, elleni küzdelemben. The principal tasks of general practice in the fight against tuberculosis of children NÉPEGESZSÉGÜGY 1956, 37/2 (37-40)

Infantile tb has relatively little decreased in Hungary, the number of tuberculous children has increased. The necessity of tightening up of the tb campaign is stressed (strict maintenance of BCG vaccinations, early detection of cases). Adequate modern treatment may decrease the mortality from tb meningitis.

(XVII, 15)

NYARADY, Ivan, dr.; FLESCH, Istvan, dr.; DEMENY, Eva, dr.

Data on the prevention of infantile mortality in tuberculosis.  
Orv. hetil. 101 no. 18:613-618 1 My '60.

1. Az Országos Kórházi Tbc. Intézet és a budapesti Központi Tbc. Gondozó Intézet.  
(TUBERCULOSIS in inf. & child)

FLESCH, Istvan, dr.

Tuberculin control of BCG vaccination in newborn infants by the human T.T. forte plaster. Orv.hetil. 101 no.36:1273-1275 4 S '60.

1. Fovarosí Tanács VB XII. (Eu) osztály anyá- és gyermekvédelmi csoportja

(BCG VACCINATION)  
(INFANT NEWBORN)  
(TUBERCULIN)

FLESCH, Istvan, dr.

Results of 1959 BCG vaccination of school children in Budapest.  
Gyermekgyógyászat 11 no.1):305-311 0 '60.

1. A Budapest Főváros Tanácsa Vegrehajtóbizottságának XII. egészségügyi osztálya (Vezető főorvos: Fodor Ferenc dr. az orvostudományok kandidátusa) III. számú Anyagyermekekvédelmi csoportjának (Csoportvezető főorvos: Kormendy István dr.) közleménye.  
(BCG VACCINATION statist)

FLESCH, Istvan, dr.; PAL, Laszlo, dr.

Results in the fluorographic examination of school children. Gyermekgyógyászat 13 no.3:65-72 Mr '62.

1. A Fov. Tanacs Gyermektbc-vedelmi Kozpontja (Vezeto: Flesch Istvan, dr.) es a Budapesti Kozponti Tbc-gondozo Intezet Rontgenernyo-fenykepszaro-allomasok (Vezeto: Pal Laszlo dr.) kozlemenye.

(TUBERCULOSIS PULMONARY in inf & child)

FLESCH, Istvan, dr.

Experiences with tuberculin mass screening among children of compulsory school age. Gyermekgyógyászat 14 no. 7:215-219 J1 '63.

1. A Fovarosí Tanács Gyermek TBC Védelmi Központ (vezető: Flesch István dr.) közleménye.

(TUBERCULIN REACTION) (BCG VACCINATION)

FLESCH, Istvan, dr.

Importance of BCG vaccination in the protection of (contact)  
children living in a tuberculous environment. Gyermekgyógyászat  
14 no.11:339-352 N '63.

1. A Fővárosi Tanács Gyermek TBC Védelmi Központ közleménye.  
(Vezető: Flesch István dr.)  
(BCG VACCINATION) (STATISTICS)  
(TUBERCULOSIS IN CHILDHOOD)

**FLEISCH, S.**

Vegetative nervous system in the development of tuberculosis in children. Gruslica 20:6 Suppl. 2:120-122 1932. (CML 24:2)

1. Director of the State Pediatric Sanatorium, Budapest.

FLESCH, S.

Significance of the phenomenon of excretion of Mycobacterium tuberculosis in children. Gruslica 20:6 Suppl. 2:122-123 1952. (GLML 24:2)

1. Director of the State Pediatric Sanatorium, Budapest.

L 33714-66

ACC NR: AP6025153

SOURCE CODE: RU/0012/65/061/004/0567/0572

AUTHOR: Floschin, D. (Doctor; Colonel; Candidate of medical sciences); Marinescu, A.  
(Doctor; Lieutenant colonel); Roman, V. (Doctor; Major)

ORG: none

TITLE: Treatment of arterial wounds in times of peace and under conditions of battle

SOURCE: Revista sanitara militara, v. 61, no. 4, 1965, 567-572

TOPIC TAGS: wound, circulatory system, military medicine

ABSTRACT: A survey of the various types of arterial wounds occurring in peacetime and under battle conditions. For each type of injury the discussion includes a brief literature survey, treatment advised, and a discussion of the authors' experiences, occasionally accompanied by case histories. [JPRS: 33,500]

SUB CODE: 06 / SUBM DATE: 22Jan65 / ORIG REF: 003 / OTH REF: 004

Card 1/1

RUMANIA

FLESCHEIN, D., Dr, Col, and MARINESCU, A., Dr, Lt-Col [affiliation not given]

"Considerations on Abdominal Wounds Caused by Firearms in Connection with 15 Cases Treated."

Bucharest, Revista Sanitara Militara, Vol 62, No 5, Sep-Oct 66, pp 883-885.

Abstract: A brief discussion of 15 cases of penetrating abdominal wounds caused by firearms, resulting in injuries of various types. The diversity of damage which may be caused by such wounds is stressed. In the 15 cases reported, a mortality rate of 25.9 percent resulted, attesting to the seriousness of such wounds.

Includes one Rumanian and one British reference. --  
Manuscript submitted 12 April 1966.

ACCESSION NR: AP5023130

RU/0012/64/000/004/001/0646

AUTHOR: Fleschin, H. D. (Lieutenant Colonel, Physician); Roman, Gh. V. (Major,

TITLE: Gastric surgery in the military hospital of Constanta during the last 5 years.

SOURCE: Revista sanitara militara, no. 4, 1964, 641-646

TOPIC TAGS: surgery, thoracic surgery, military medicine

ABSTRACT: . Very complete clinical data on 315 operations including 278 gastrectomies for ulcer, 15 for cancer; 4 cardiomyotomies, 2 diverticulectomies, 4 gastroenteric anastomoses, 12 other gastrointestinal operations. Comprehensive analysis and discussion of technic highlighting the most important points to note during and after operation, with observations drawn from the clinical material at hand. Three Romanian references include thesis by senior author.

Card 1/2

ACCESSION NR: AP5023130

CLASSIFICATION: none

ENCLOSURE: 01

OTHER: 002

RUMANIA

FLESCHE, H., Dr, Col, MARINESCU, A., Dr, Lt-Col, ROMAN, V., Dr, Maj, and VASILE, Al., Dr, Cpt [affiliation not given]

"Considerations on the Current Treatment of Recurrent Scapulo-Humeral Dislocations in the Military Environment."

Bucharest, Revista Sanitara Militara, Vol 62, No 2, Mar-Apr 66, pp 221-224.

Abstract: Observations based on 15 cases of recurring dislocations treated surgically as follows: 9 by the Von Wahl operation (one recurred); 3 by the Wilmoth-Lenormant operation (one recurred); 2 by the Stavrache modification of the Bankart operation (one recurred), and one by the original Bankart operation (good results). Special emphasis is devoted to a description of the Bankart procedure, which the authors find preferable to the other methods and plan to use more frequently in the future.

Includes 3 references, of which one German and 2 Rumanian.

FLESER, S.

Some achievements relative to buildings with cast-concrete walls. p. 613.

REVISTA CONSTRUCTIILOR SI A MATERIALELOR DE CONSTRUCTII. (Asociatia Stiintifica a Inginerilor si Technicienilor din Rominia si Ministerul Constructiilor si al Marerualelor de Constructii) Bucuresti, Rumania. Vol. 10, no. 12, Dec. 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 6, June 1959

Uncl.